Supporting Interlibrary Loan and Direct Loan Services in California's Multitype Library Environment

Prepared for

The Mountain Valley Library System
And
The California State Library

by

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Introduction

The encouragement of resource sharing activities is a major goal of virtually every state library agency. The sharing of materials to benefit the widest population possible is, after all, a logical extension of one of the primary functions of libraries, i.e., acquiring an item once for use by many.

While the goal of encouraging resource sharing is a common one, the nature of the resource sharing activities that are encouraged and the means used to promote cooperation between and among libraries vary widely.

Some states promote resource sharing with little more than words. Many support interlibrary loan by funding components of an infrastructure for resource sharing activities such as statewide databases, state and regional interlibrary loan clearinghouses, and physical delivery systems.

A relatively small number of states provide some form of direct reimbursement to libraries to offset cost involved in providing interlibrary loan or direct walk-in service to individuals who are not part of their primary service population. Very few states have such programs that extend to all types of libraries.

The Library of California Act, signed into law just over one year ago, is arguably the most comprehensive piece of library resource sharing legislation ever enacted nationally. It envisions public access to library service that transcends jurisdictional boundaries and that breaks down barriers between types of libraries. As the name of the Act implies, this legislation seeks to weld California's thousands of libraries into a single seamless information system for the benefit of all of California's residents.

This study attempts to identify methods of compensation that will foster the kind of resource sharing and interlibrary cooperation envisioned in the Library of California Act.

Methodology

The consultants collected information from state library agencies and from library consortia throughout the United States in an effort to discover compensation models that may help California reach its resource sharing goals. A simple web-survey was developed to request basic information from each state. Library agency heads were asked whether a statewide interlibrary loan program exists in their state, whether their state has a statewide borrowers' card or universal access program, and whether direct compensation programs are included for either interlibrary loan or direct loan. The web-survey also asked for the name, phone number and e-mail address of the appropriate person to contact for follow-up information. The web-survey for library consortia was modified slightly to gain insight into the scope of libraries involved.

The consultants then sent e-mail messages to the state librarian or chief officer of each library agency and to the director, administrator, or head of the interlibrary loan operation in selected academic and multitype consortia. The e-mail briefly described the study and asked them to complete the web-survey. A "hot-link" to the appropriate survey was provided in the e-mail message. Responses to the web-surveys were received from thirty-one state library agencies and from three library consortia.

Follow-up telephone calls were placed to organizations that did not respond to the web-survey and to respondents that had compensation programs either for interlibrary loan or direct loan. Forty-five (45) states and 9 (nine) library consortia provided information to the consultants.

The consultants reported their initial findings in written form in an interim report and met with California State Library (CSL) staff in Sacramento on September 30, 1999, to discuss the relevance of various programs to the California situation. Massachusetts and Oregon were identified as being of greatest interest in regard to their interlibrary loan reimbursement programs. The direct loan programs of Connecticut and Iowa were selected as models to be investigated in greater detail. The only consortia program identified for further study was the Research Libraries Group (RLG) "SHARES" interlibrary loan net-lending reimbursement program.

Certain aspects of a few other statewide programs were deemed of interest for additional follow-up as well. The State of Kansas provides funding to major libraries for collection development in specific subject areas to support interlibrary loan in the state. This concept seemed worth exploring in greater detail. New Jersey was also seen as being of some interest because of their work on the development of a statewide "virtual catalog" and interlibrary loan system.

Following the meeting with CSL staff, the consultants gathered additional information including statistical and financial data, procedural documents, and insights into the burden of record keeping and into the policy implications of each of the selected programs.

The pros and cons of each program were identified and each compensation method was evaluated against criteria developed by the consultants as representing model resource sharing behaviors.

A preliminary report was presented to the California State Library Board at their meeting on November 12, 1999. Following this meeting, the preliminary report was posted on the consultants' web-site and a link was established from the California State Library's web-site. Comment boxes were included in the posting to allow input from librarians in the field. Comments received were considered as the final report was written.

An attempt was made to interpolate the cost of the various programs if applied in California and finally, several compensation alternatives that were deemed practical for California were developed.

One additional note is necessary. If California had been included in the data gathering process, the interlibrary loan and direct loan programs under the California Library Services Act and the expansion of these programs under the Library of California Act in recent months would have been singled out for further examination. It should be understood that these programs are already the most extensive of their type in the nation.

Background

A number of important findings regarding resource sharing arise from the collection of information from the states and consortia. First and foremost, the world of resource sharing is in the process of a major change. Shared automation systems, linked local automation systems, web-based catalogs, virtual catalogs, full-text/full-image periodical databases, electronic document delivery, and the availability of functions such as patron-initiated holds and patron-initiated interlibrary loan have all contributed to the change. Together these factors have altered the traditional definition of interlibrary loan and have created a flood of requests for walk-in as well as remote services that often cross jurisdictional boundaries.

The combination of participation in a shared automation system, the availability of patron-initiated interlibrary loan, and the existence of a rapid physical delivery system has resulted in a doubling, tripling, or even a quadrupling of interlibrary transactions in some regions of the country. However, as the number of these kinds of transactions has skyrocketed, some regional library systems report that the cost of these automated transactions has fallen, in some cases, to levels below $ 1.00 per item.

At the same time, it must be understood that highly labor-intensive interlibrary transactions requiring professional assistance still exist. The $ 20 or $ 30 per transaction loan is not a thing of the past, nor does the cost of these transactions signal waste or ineptness. Rather, the wide variation in cost per transaction reflects, at least in part, the very different nature of two kinds of activities that are usually lumped together under the single title of "interlibrary loan."

It is interesting to note that some of the most labor-intensive, and therefore costly interlibrary loan transactions, are requests that are not filled in spite of considerable effort to verify and/or to locate esoteric documents. The enormous variation in the cost of interlibrary loan transactions cited above serves to point out some of the obvious difficulties with transaction-based reimbursement schemes.

The role of interlibrary loan staff in libraries is also changing. Most states report a steady decline in traditional staff-mediated interlibrary loan transactions although the volume of interlibrary loan traffic on national networks like OCLC remains strong. At the same time that many local libraries are reporting decreasing mediated interlibrary loan activity, there are many anecdotal reports that the requests that are received tend to be more difficult. One can speculate that people find the "easy stuff" on the Internet and turn to librarians for help finding more obscure items.

Libraries that calculate the cost of direct loan transactions to non-residents generally report increased costs per transaction. Furthermore, most indications seem to suggest that these costs will continue to increase. Most often the cost of this kind of transaction has been calculated in a rather simplistic way. The information collected as a part of this study indicates that the practice of dividing all operational costs by the number of circulation transactions to arrive at a "cost per circulation" is still quite common.

This method of costing has never been a true reflection of the cost of loaning a single volume since it ignores the costs involved in carrying out other activities, ranging from reference transactions to story-hour programs, that typically take place in public libraries. While an argument is often made that other library services are generally used in similar proportion to circulation, the extension of direct loan reimbursement to libraries that offer very different programs of service calls the gross calculation of circulation costs into question.

While circulation of materials is a common and important measure of service for public libraries, it is a poor indicator of the level of service offered by an academic research library or a special library. Furthermore, even some public libraries are abandoning, or at least reducing, their emphasis on circulation statistics. Many public libraries are experiencing a decline in circulation at the same time they are experiencing an increase in "gate counts." Many attribute this fact to the availability of the Internet. People are still visiting libraries; however, they are starting to use them differently.

If circulation continues to decline while inflationary pressures push total operational costs upward, the result will be a rapidly increasing cost per circulation. This fact must be considered in determining a method for reimbursement of direct loans.

The dramatic changes in resource sharing activities outlined above provide a context for the information collected from the state library agencies and library consortia. The consultants found a number of states that have altered or even dropped resource sharing reimbursement programs entirely in recent years.

In some cases, funds formerly devoted to transaction-based reimbursement systems have been reallocated to pay for other resource sharing activities. Included are statewide electronic database projects, web-based union catalogs and/or interlibrary loan systems, and shared, linked, or virtual catalog projects.

Twenty-two (22) of the 45 (forty-five) states responding to the consultants either through the survey or by way of follow-up phone calls report that they have a statewide program for the reimbursement of at least some costs associated with interlibrary loan. In a number of cases, the compensation is in the form of payment for a library's use of the OCLC interlibrary loan system. A number of other states require that libraries participate in interlibrary loan programs in order to qualify for general state-aid or to qualify for membership in regional library systems.

While 15 (fifteen) states report having some sort of direct loan or statewide borrowers' card program, only seven, including California, indicate that any direct reimbursement is provided at the state level. It should be noted however, that a larger number of states do provide indirect support for interlibrary loan and/or for direct loan programs through state support of regional library systems. Many states allow, but do not require, regional systems to provide reimbursement for interlibrary loan or direct loan within their respective service areas. Depending on the state, this reimbursement may be limited to public libraries or may be extended to all types of libraries. The chart on the following page provides a summary of activities by state.

State	State ILL Reimbursement?	Direct Loan Program?	Direct Loan Reimbursement?
Alabama	Yes	No	No
Alaska	Yes	No	No
Arkansas	No Response	No Response	No Response
Arizona	Yes	No	No
California	Yes	Yes	Yes
Colorado	Yes	Yes	No
Connecticut	No	Yes	Yes
Delaware	Yes	No	No
Florida	No	No	No
Georgia	Yes	No	No
Hawaii	No Response	No Response	No Response
Idaho	No	No	No
Illinois	No	No	No
Indiana	No	Yes	Yes
Iowa	Yes	Yes	Yes
Kansas	No	Yes	No
Kentucky	No	No	No
Louisiana	No	No	No
Maine	Yes	No	No
Maryland	Yes	Yes	No
Massachusetts	Yes	Yes	Yes
Michigan	No	Yes	No
Minnesota	No	Yes	No
Mississippi	No	No	No
Missouri	No/Yes	No	No
Montana	Yes	No	No
Nebraska	Yes	No	No
Nevada	No Response	No Response	No Response
New Hampshire	Yes	No	No
New Jersey	Yes	No	No
New Mexico	No Response	No Response	No Response
New York	Yes	No	No
North Carolina	No	No	No
North Dakota	No	No	No
Ohio	No	No	No
Oklahoma	No	No	No
Oregon	Yes	No	No
Pennsylvania	No	Yes	Yes
Rhode Island	Yes	Yes	No
South Carolina	No	No	No
South Dakota	No	No	No
Tennessee	Yes	No	No
Texas	Yes	Yes	No
Utah	Yes	No	No
Vermont	No	No	No
Virginia	No Response	No Response	No Response
Washington	No	No	No
West Virginia	No	Yes	No
Wisconsin	No	No	No
Wyoming	Yes	Yes	Yes

Our examination of library consortia reveals that reciprocity and/or the waiver of typical fees for interlibrary loans to participating institutions is the prevailing model. While some walk-in programs exist among academic libraries in the same geographic area, interlibrary loan rather than direct loan seems to be of greatest importance in the academic and special library communities.

The consultants also identified several states in which state funded institutions of higher learning are required by law to serve all residents of the state. Some states only require in-house access to materials. A few require the lending of all circulating items; however, this fact is often a closely guarded secret. In one state the situation was characterized as, "we do it but we don't advertise it."

Relevant Programs

Interlibrary Loan Compensation/Reimbursement

As was mentioned earlier, compensation for interlibrary loan activity takes many forms. In some cases, state funds are used to offset the cost of using OCLC's interlibrary loan system. A few direct payment programs provide some offset for all lending transactions. Most provide some level of reimbursement for net loans (total items loaned to other libraries minus the total number of items borrowed from other libraries).

The State of Missouri has what we believe is the most unique program. Because interlibrary loan traffic among Missouri libraries is extremely low and because the state library agency wants to encourage this type of resource sharing activity, compensation in the form of covering the cost of using the OCLC interlibrary loan subsystem for ***borrowing*** is provided.

Participation in interlibrary loan activity is required of libraries in a number of states as a condition of receiving state aid or participating in regional multitype or public library systems.

Massachusetts

Massachusetts is in the third year of a multitype interlibrary loan "net-lender offset" program. This program only provides reimbursement for net interlibrary loan transactions between libraries that are located in different multitype regions. Some compensation for transactions between libraries within regions is provided by six of the seven regional multitype systems in the state; however this compensation varies from region to region.

The Commonwealth of Massachusetts has allocated $ 275,000 in each of the last three years to pay for this program. The money for the program comes from the state's general fund. Because the overall funding for the program has remained unchanged and because the number of libraries participating in the voluntary program has increased each year, the compensation per loan has dropped significantly each year.

Payments in year one were at the rate of $14.39 per net loan. Fifty-one (51) libraries received payments for approximately 19,100 net-loan transactions. In the second year, 80 libraries with a total of approximately 26,800 net-loans participated. Of the 80 (eighty) libraries, 45 (forty-five) were public libraries, 32 (thirty-two) were academic libraries, two (2) were special libraries and one (1) was a school library.

During the third year, over 90 (ninety) libraries participated in the program. It is anticipated that offset payments will be made for between 30,000 and 35,000 net-loans. The payment rate per net-loan transaction will be somewhere between $ 8.00 to $ 9.00 per loan. Interestingly, payments are not made directly to libraries. Instead, payments are deposited with NELINET (New England's OCLC network) and are used to reduce OCLC costs. (The explanation of this nuance is it ensures a direct benefit to libraries by keeping the money out of city general funds.)

One final note - - since state funding is used to support the multitype regions in Massachusetts, compensation for net loans within regions is largely paid for with state dollars. However, the decisions regarding if and how these dollars are distributed are made at the regional level.

Pros:
Multitype involvement
Compensation per loan is relatively high
Applying program only to transactions between regions reduces cost of program
State funding (hard money) rather than LSTA (soft money)

Cons:
Amount of funding available for program is stagnant leading to declining reimbursement per transaction
Relatively few libraries receive payments
Requires significant record keeping by participating libraries

Oregon

Oregon statutes contain language for both a direct loan program and an interlibrary loan net-lender reimbursement program; however, neither aspect has received any state funding. The program is now in its fourth year of operation.

The Oregon State Library allocated up to $ 400,000 of its federal LSTA money to pay for interlibrary loan net reimbursement during FY 2000. This amounts to approximately 24% of the state's total LSTA funding. No funding is currently provided from any source for direct loan reimbursement. The program is now in its fourth year of operation.

Public libraries and both public and private academic libraries are eligible for the program. School and special libraries are not currently eligible for participation; however, loans made by public or academic libraries to school libraries are eligible for reimbursement. Fifty-one (51) public libraries and 26 (twenty-six) academic libraries are currently participating in the program.

Compensation is provided on a net loan basis; however, the Oregon program draws a distinction between interlibrary transactions completed within shared automation systems and those submitted using more traditional means such as the OCLC interlibrary loan system or ALA interlibrary loan request forms. Net loans between libraries in the same shared automation system are reimbursed at $ 1.00 per net-loan transaction. Reimbursement for "traditional" interlibrary loan is at $ 4.00 per net-loan transaction. The $ 1.00 shared system rate was introduced recently as a cost containment measure.

The total cost of funding reimbursement payments under the program has been increasing steadily. In fact, the cost doubled between year two and year three because of greater participation and increased transactions facilitated by shared automation systems.

Participating libraries are required to comply with the state's interlibrary loan code and must not assess any charges for interlibrary loan transactions (several major libraries eliminated such charges to participate in the program).

Pros:
Some multitype involvement
Compensation per loan is at a moderate level
Recognizes differential in cost of different types of transactions

Cons:
LSTA funding (soft money) rather than state funding (hard money)
Rewards the use of outdated, traditional interlibrary loan processes
Requires moderate record keeping by participating libraries

Research Libraries Group (RLG) SHARES Program

The Research Libraries Group SHARES program represents a self-funded consortial program rather than a governmental program. Funds used to reimburse SHARES participants come from participating libraries themselves.

The program generates the funds it needs to compensate net-lenders by charging net-borrowers at the rate of $ 7.00 per net-borrowing transaction. The SHARES program has existed since 1992; however, the program was revised to its present form in 1995.

A total of eighty-five institutions (132 separate libraries) participate in the program. The libraries include national, academic, public, research, and special libraries.

RLG prefers not to have the total amount of the reimbursements and payments among libraries made public; however, the total amount is in the six-figure range and compensation and charges to the largest net-lenders and net-borrowers both exceeded $ 40,000 in FY 1998.

Pros:
Self-funded
Multitype involvement
Eliminates transaction-based invoices
No record-keeping by individual libraries
Many transactions "cancel each other out"

Cons:
Limited to RLG SHARES members and to transactions completed using the RLIN ILL system
Requires significant record calculation by RLG staff
Difficult to forecast cost/reimbursements

Kansas

Kansas is included in this listing because this state takes an entirely different approach to compensating net-lending libraries. There is no direct transaction-based payment from the state for interlibrary loan transactions. Instead, Kansas has what it calls the "Interlibrary Loan Development Program."

The Interlibrary Loan Development Program provides collection development grants to 23 "resource" public libraries. The libraries are specifically named in the state statutes that established the program. Each of the libraries named in the statutes has been assigned a specific Dewey Decimal classification range in which it is expected to strengthen their collection. For example, the City of Iola maintains a large genealogy collection.

Libraries receiving grants are required to make their entire collection available for interlibrary loan purposes without charge. The amount of the grants provided to libraries is determined by a formula that is related to the size of the library's service population. Grants range from about $ 2,500 to over $ 25,000.

This program has been in place since 1987 and the original funding target was $ 1.2 million. However, the highest funding received for the program to date has been $ 625,000 and the average amount of state funding available has been about $ 500,000.

Pros:
Builds better library collections
Reduces some costly duplication of resources
State funding (hard money) rather than LSTA (soft money)

Cons:
Program is limited to public libraries
Is viewed by some libraries as an entitlement
Has been the target of budget recisions

Direct Loan Reimbursement Programs

Information is presented below regarding two representative programs. The State of Pennsylvania also has a program called "Access Pennsylvania" that could have been included. It is, in many ways, similar to Iowa's "Open Access" program. However, the Pennsylvania program includes some rather complex variations that have more to do with the governance structure of the commonwealth's libraries. We have, therefore chosen to use Iowa's program as being more representative of this kind of access program.

It should also be noted that open access, sometimes statewide and sometimes only within a region, is frequently included as a requirement for participation in other programs such as general state-aid programs.

Connecticut

Connecticut stakes a claim to being the home of the nation's first statewide library card; the "Connecticard."

The program, which includes only public libraries, has been in place in one form or another since 1973/74. The current reimbursement formula has been used since 1982.

Libraries are compensated for loans to non-residents of their library's jurisdiction on a two-tiered basis. Half of the state funding allocated to the program is used to reimburse all libraries for every Connecticard transaction completed in their library. The second half of the state funding is used to compensate net-lending libraries for what are called "net-plus" loans. These loans represent the imbalance between Connecticard loans made by a library to non-residents minus the number of Connecticard loans made to residents of the library's jurisdiction by other libraries.

Current reimbursement for all loans is at the rate of $ .09 per loan. Current reimbursement for net-plus loans is at the rate of $ .22 per net transaction. Because state funding for the Connecticard program has been stagnant at $ 697,835 for five years, the amount of reimbursement for all transactions has been dropping gradually. Interestingly, the reimbursement rate for net-plus loans has remained relatively stable for many years. Connecticut reimbursed libraries for 3,673,868 basic loan transactions and for 1,622,214 net loans in 1998/99.

Because Connecticut's infrastructure support for statewide interlibrary loan includes a statewide delivery system, Connecticard users are able to return materials to any public library rather than only to the library from which the item was borrowed.

Pros:
Virtually all participating libraries receive some payment
State funding (hard money) rather than LSTA (soft funding)

Cons:
Limited to public library participation
Relatively low level of reimbursement per transaction

Iowa

Iowa's "Open Access" program has been in place since October 1989. The program is open to all types of libraries; however, most of the 600 participants are public libraries (Iowa has the third largest number of public libraries in the nation - almost all are municipal libraries). A few schools and academic libraries do participate although the 3 major state-funded universities do not.

Funding for the program is from the state's general fund and participation is voluntary; however, a new state-aid program requires libraries to participate in the Open Access program as a condition of receiving aid. This has significantly increased the number of libraries that have filed to participate.

The state pays libraries at the rate of $ .50 per Open Access loan and also pays libraries for postage required to mail materials borrowed at one library and returned at another back to their home library. Over 2.4 million Open Access transactions were compensated during the past fiscal year.

Open Access patrons use their home library card as evidence that they are qualified to use the program. This is an important factor in Iowa since the state does have areas that are not taxed for library service. Individuals in these areas must first qualify for local library service (usually by purchasing a non-resident card) before they can use the Open Access program.

Iowa also has an interlibrary loan reimbursement program, "Access Plus," that reimburses libraries at the rate of approximately $ 2.00 per loan.

Pros:
Some multitype involvement
Moderate rate of reimbursement per transaction
State funding (hard money) rather than LSTA (soft money)

Cons:
Program doesn't automatically include all residents of the state
Lack of participation of major universities

The Future of Resource Sharing

Overview

Traditional, mediated interlibrary loan activities have often been considered the most successful of the various components of resource sharing because of the widespread availability and use of interlibrary loan. For example, OCLC's ILL system handles over 8.2 million annual transactions initiated by 6,000 libraries around the globe, and ILL borrowing among the 122 members of the Association of Research Libraries has increased 8% per year over the past decade.

However, the number of effective resource sharing options has increased in the past five or so years. Improvements in the traditional ILL process as well as alternatives to traditional ILL offer libraries new options to obtain materials for their patrons.

Interlibrary loan operations have benefited from a number of products aimed at streamlining the process and reducing staff involvement. Management software can track requests on several of the national ILL systems. OCLC has introduced a number of products and services designed to aid ILL staff, including ILL Direct Request, the Interlibrary Loan Fee Management service, and Custom Holdings. The Research Libraries Group's Ariel document delivery software eliminates delays in sending copies of journal articles, and at least two new products permit Ariel documents to be sent directly to the user's workstation. Many libraries have designed web forms to permit patrons to submit requests electronically.

These products and services, however, have one major drawback. There is no seamless integration between and among them. Key to the future improvements of mediated interlibrary loan is widespread adoption and implementation of national and international technical standards. Incorporation of communication standards in ILL products will permit, for example, an unfilled ILL request to be transferred from the OCLC to the Docline ILL system without library staff needing to re-key the request.

The technical interconnectivity of ILL systems is complemented by increased attention to internal processes and workflows within ILL operations. One of the key findings of the Association of Research Libraries' (ARL) two-year study of ILL operations in research and college libraries was that high-performing borrowing and lending operations have efficient internal procedures. The study confirmed that personnel expenses represent two-thirds of the borrowing unit cost and three-quarters of the lending unit cost. High-performing operations are effective in maximizing use of technology to minimize use of staff. The study has underscored the need to improve ILL operations, much like the attention given to cataloging operations in the 1970s.

Unmediated Borrowing/Remote Circulation

The ARL ILL/DD Performance Measures Study also confirmed the cost-effectiveness of user-initiated, unmediated ILL. Libraries offering unmediated ILL (or remote circulation) provided faster turnaround time and had significantly lower borrowing unit costs than libraries that offered only mediated ILL. Many libraries see the significant potential of user-initiated borrowing and are in the planning or early implementation stages of offering user-initiated ILL systems. Many libraries are purchasing the same system, while others are piloting products that link disparate union catalogs and ILL systems into a virtual catalog/ILL solution. Academic and public libraries in Illinois, and academic libraries in Ohio and Oregon are recording increases of 500-1000% in what might be considered ILL transactions. But, because the transactions are more circulation-like in the modest staff involvement, libraries are able to sustain such increases with no or modest staff increases.

These user-initiated, remote circulation systems, however, are stand-alone and aimed at returnables (books, CDs and other items a library lends). If a patron does not find an item in the union catalog, the patron is required to submit a traditional ILL request. At present, there is no capability for an individual to search a shared union catalog and initiate a mediated ILL transaction. Implementation of appropriate standards would eliminate this current weakness.

Libraries are also seeking ways to improve methods of accessing and delivering non-returnables, or copies of journal articles, book chapters, and conference papers. Most libraries have joined one or more consortia to effect discounts in the purchase of electronic full-text or full-image databases. Consortial or statewide purchase of aggregated databases of popular and scholarly materials will ease the pressure on interlibrary loan to supply copies of such materials. Libraries will increasingly provide hot-link access to electronic materials from their online catalogs rather than mounting the files of available titles on their web site. Consortial purchasing may be the most effective way of improving the cooperative collection development aspect of resource sharing. Electronic books are just beginning to be made available, and the increasing availability and lowering cost of electronic books promise an alternative to either mediated ILL or direct borrowing.

Internationalization/Globalization

Internationalization/globalization is another key trend in resource sharing. Internet access to an increasing number of online catalogs, regardless of the library's physical location, is coupled with electronic ordering and delivery. U.S. libraries are no longer limited to requesting materials only from other U.S. libraries on OCLC; they are now able to order from libraries in over 40 (forty) countries on OCLC, and increasingly are able to order directly from libraries via the Internet.

Principles to be Considered in Developing a New Compensation Program

Following is a set of principles that the consultants believe should be considered in making any determination on reimbursement or compensation for interlibrary loan or direct loan programs. These principles were posted on the consultants' web-site for approximately one-month. A link to the web-page was established on the California State Library's web site.

Comments received on the principles were mostly supportive. Visitors to the web site were given the opportunity to register their opinion regarding each principle. Choices were:

strongly agree
agree
no opinion
disagree
strongly disagree

In all cases the combined total of strongly agree and agree constituted the majority of responses. Very few responses of disagree or strongly disagree were received.

Text boxes were also provided for each principle. A total of approximately fifteen pages of text comments were received from thirty visitors to the site. All of these comments were considered as the principles were refined.

Principle 1

The reimbursement or compensation program should result in a "Library of California" program that is relatively easy for the public to understand and relatively painless for the public to access.

While the consultants presume that the compensation program will be invisible to the end user, we believe that the compensation method selected must encourage broad participation of libraries without imposing onerous or confusing requirements or regulations on the public.

Principle 2

The reimbursement or compensation program should encourage, rather than discourage, the appropriate use of interlibrary loan and direct loan.

Interlibrary loan and direct loan should supplement rather than replace local/primary library service. The compensation program that is put in place should recognize the responsibility of local/primary libraries to address the basic library and information needs of their home clientele. Interlibrary loan protocols should reflect an expectation that participating libraries should be a dependable source of information for the users in their service area or within their institution.

Principle 3

The reimbursement or compensation program should optimize the use of state dollars for purposes that result in better library service rather than support for administrative/record keeping functions.

If the compensation program requires the collection of transaction data, automated systems should be used to the greatest practicable extent to capture the required information. Data collection should not be burdensome for participating libraries or for the agency(ies) that administers the program.

Principle 4

The reimbursement or compensation program should encourage the participation of as many libraries as possible and as many types of libraries as possible.

The Library of California concept attempts to provide the public with a seamless system of library and information services. This end can only be accomplished if a large number of libraries participate in the program. Incentives for initial and ongoing participation should be integral to the program.

Principle 5

The reimbursement or compensation program should encourage resource sharing within regions.

Both the size and the diverse nature of the State of California suggest that some regional component should be included in the compensation program. A one-size fits all program is unlikely to be satisfactory in all areas. The involvement of local librarians in decision making within regions and interaction between nearby libraries can lead to cooperation and coordination that goes beyond the scope of the Library of California program. Furthermore, the existence of regional automation systems and delivery systems provide building blocks on which effective and efficient resource sharing can be built.

Principle 6

The reimbursement or compensation program should promote the use of efficient library practices such as the use of electronic interlibrary loan systems.

The compensation program that is selected should encourage new, efficient resource sharing practices. Virtual catalogs, patron-initiated unmediated interlibrary loan, and electronic document delivery should be promoted rather than discouraged.

Principle 7

The reimbursement or compensation program should provide payments that are meaningful but should reflect handling costs rather than complete value of transactions.

It is impossible to determine the value of an interlibrary loan or direct loan transaction to an end-user. It is somewhat easier to determine what a specific transaction costs an individual library. However, basing compensation on the highest cost transactions tends to reward spending rather than service.

Libraries must also consider that their primary clientele receive value from the Library of California program in that they can access the holdings of other libraries. If a transaction based compensation system is selected, it should address transaction-related costs rather than the initial cost of purchasing the item, costs associated with housing the item, etc.

Compensation Projections

Because resource sharing activity is influenced by many uncontrollable factors, it is impossible to accurately project the long-term cost of reimbursements that will be required to implement the Library of California Interlibrary Loan and Direct Loan programs. However, California's experience under the California Library Services Act, the initial expansion of reimbursement under the Library of California pilot program, and the experience in other states allows the creation of some educated estimates based on a set of assumptions.

Following are the assumptions used by the consultants to project potential compensation costs:

Assumption 1

The majority of public and academic libraries will participate in the interlibrary loan and direct loan programs. Fewer school and special libraries will participate.

Assumption 2

The number of relatively costly traditional mediated interlibrary loan transactions will decrease over time while the number of patron-initiated, unmediated interlibrary loan transactions will initially increase substantially, will then plateau, and will eventually drop gradually.

Assumption 3

Increases and decreases in transactions will be uneven across the state since increases will largely be driven by the implementation of virtual catalogs, web-based catalogs, and other automated systems that allow patron-initiated interlibrary loans.

Assumption 4

Most reimbursable direct loan activity will be based in public libraries. Walk-in use of some academic libraries may be significant; however in the overall picture, public library use will drive the amount of compensation required.

Cost Model

Following are estimates broken into three separate categories. They are:

Estimate of Participating Libraries
Estimate of Net Interlibrary Loan Transactions
Estimate of Net Direct Loan Transactions

In each case, we have attempted to "bracket" the estimates, i.e., we have provided what we believe is a low-end estimate and a high-end estimate. In each case, we believe that California's actual experience in implementing the Library of California program will fall between the two extremes, and probably closer to the low rather than the high end.

Participating Libraries

Low-End Estimate

In the low-end estimate, we project that approximately 3,000 (of a potential 8,000) libraries may initially participate in the Library of California program. This represents a majority of public and academic libraries and a much smaller percentage of school and special libraries. We anticipate that the number of participating libraries will grow by 5% per year over the next five years.

Fiscal Year	**Libraries Participating**
FY 2000/2001	3,000
FY 2001/2002	3,150
FY 2002/2003	3,308
FY 2003/2004	3,473
FY 2004/2005	3,647
FY 2005/2006	3,829

High-End Estimate

In the high-end estimate, we project that approximately 4,500 (of a potential 8,000) libraries may initially participate in the Library of California program. This represents a majority of public and academic libraries and a higher level of participation among school and special libraries than is included in the low-end estimate. Again, we presume that the number of participating libraries will grow by 5% per year over the next five years.

Fiscal Year	**Libraries Participating**
FY 2000/2001	4,500
FY 2001/2002	4,950
FY 2002/2003	5,445
FY 2003/2004	5,990
FY 2004/2005	6,588
FY 2005/2006	7,247

NOTE: Initial participation of school libraries will be greatly influenced by the nature of the compensation program that is chosen and the requirements placed on participating institutions. For example, many more schools will be enticed to participate if a base grant is included in the compensation package.

Growth in the "out years" in both scenarios will primarily be additional schools. This will have the effect of adding libraries to the program but will have only a marginal impact on the total number of interlibrary loans and direct loans.

Interlibrary Loan Transactions

Low-End Estimate

In the low-end estimate, we project that reimbursable interlibrary loan transactions for FY 2000/2001 will be approximately 1,800,000 and that this total will grow by 20% for each of the first two years, by 10% for each of the next two years and by 2.5% per year thereafter.

Fiscal Year	Reimbursable Interlibrary Loan Transactions
2000/2001	1,800,000
2001/2002	2,160,000
2002/2003	2,592,000
2003/2004	2,851,200
2004/2005	3,136,320
2005/2006	3,214,728

High-End Estimate

In the high-end estimate, we project that reimbursable interlibrary loan transactions for FY 2000/2001 will be approximately 2,500,000 and that this total will grow by 40% for each of the first two years, by 20% for each of the next two years and by 5% per year thereafter.

Fiscal Year	Reimbursable Interlibrary Loan Transactions
2000/2001	2,500,000
2001/2002	3,500,000
2002/2003	4,900,000
2003/2004	5,888,000
2004/2005	7,056,000
2005/2006	7,408,800

Direct Loan Transactions

Low-End Estimate

In the low-end estimate, we project that the number of reimbursable direct loans (net loans) in FY 2000/2001 will total approximately 13,200,000. We estimate that this total will grow by 5% during the first two years, by 4% in the next two years, and by 3% in each subsequent year.

Fiscal Year	Reimbursable Direct Loan Transactions
2000/2001	13,200,000
2001/2002	13,860,000
2002/2003	14,553,000
2003/2004	15,135,120
2004/2005	15,740,525
2005/2006	16,212,741

High-End Estimate

In the high-end estimate, we project that the number of reimbursable direct loans (net loans) in FY 2000/2001 will total approximately 15,000,000. We estimate that this total will grow by 10% during the first two years, by 8% in the next two years, and by 6% in each subsequent year.

Fiscal Year	Reimbursable Direct Loan Transactions
2000/2001	15,000,000
2001/2002	16,500,000
2002/2003	18,150,000
2003/2004	19,602,000
2004/2005	21,170,160
2005/2006	22,440,370

Interlibrary Loan Reimbursement Costs Based on Current (Pilot) Model

Low-End Estimate

The following projection uses the current compensation model (net loans), a base transaction rate of $ 4.00 per net-loan transaction for FY 2000/2001 (The FY 1999/2000 requested amount was $ 3.82.), and the low-end projections for interlibrary loan transactions. The compensation rate is then increased by 2% per year to cover inflationary costs. Under this scenario, the compensation rate for FY 2005/2006 would be $ 4.42 per net loan transaction.

Fiscal Year	Reimbursable Interlibrary Loan Transactions	Compensation Cost
2000/2001	1,800,000	$ 7,200,000
2001/2002	2,160,000	$ 8,812,800
2002/2003	2,592,000	$ 10,786,867
2003/2004	2,851,200	$ 12,102,865
2004/2005	3,136,320	$ 13,579,415
2005/2006	3,214,728	$ 14,197,278

High-End Estimate

The following projection uses the current compensation model (net loans), a base transaction rate of $ 4.00 per net-loan transaction for FY 2000/2001 (The FY 1999/2000 requested amount was $ 3.82), and the high-end projections for interlibrary loan transactions. The compensation rate is then increased by 2% per year to cover inflationary costs. Under this scenario, the compensation rate for FY 2005/2006 would be $ 4.42 per net loan transaction.

Fiscal Year	Reimbursable Interlibrary Loan Transactions	Compensation Cost
2000/2001	2,500,000	$ 10,000,000
2001/2002	3,500,000	$ 14,280,000
2002/2003	4,900,000	$ 20,391,840
2003/2004	5,880,000	$ 24,959,612
2004/2005	7,056,000	$ 30,550,565
2005/2006	7,408,800	$ 32,719,655

Direct Loan Reimbursement Costs Based on Current (Pilot) Model

Low-End Estimate

The following projection uses the current compensation model (net imbalance), a base transaction rate of $ .75 per net-loan transaction for FY 2000/2001 (The FY 1999/2000 requested amount was $ .73.), and the low-end projections for direct loan transactions. The compensation rate is then increased by 4% per year to cover inflation and increased per transaction costs caused by overall decreases in circulation. Under this scenario, the compensation rate for FY 2005/2006 would be $ .91 per net loan transaction.

Fiscal Year	Reimbursable Direct Loan Transactions	Compensation Cost
2000/2001	13,200,000	$ 9,900,000
2001/2002	13,860,000	$ 10,810,800
2002/2003	14,553,000	$ 11,805,394
2003/2004	15,135,120	$ 12,768,714
2004/2005	15,740,525	$ 13,810,641
2005/2006	16,212,741	$ 14,793,958

High-End Estimate

The following projection uses the current compensation model (net imbalance), a base transaction rate of $ .75 per net-loan transaction for FY 2000/2001 (The FY 1999/2000 requested amount was $ .73.), and the high-end projections for direct loan transactions. The compensation rate is then increased by 4% per year to cover inflation and increased per transaction costs caused by overall decreases in circulation. Under this scenario, the compensation rate for FY 2005/2006 would be $ .91 per net loan transaction.

Fiscal Year	Reimbursable Direct Loan Transactions	Compensation Cost
2000/2001	15,000,000	$ 11,250,000
2001/2002	16,500,000	$ 12,870,000
2002/2003	18,150,000	$ 14,723,280
2003/2004	19,602,020	$ 16,537,188
2004/2005	21,170,160	$ 18,574,570
2005/2006	22,440,370	$ 20,476,606

Cost Summary

The activities commonly grouped under the heading of "resource sharing," are all parts of an inter-related system. As is the case with any system, performance in one area can be significantly affected by performance in another. For example, the implementation of a shared catalog or a virtual catalog in a region can be expected to result in a significant increase in interlibrary loan requests, especially if the implementation includes the opportunity for patron-initiated interlibrary loans. However, the degree to which interlibrary loan increases in the long run is largely dependent on the frequency and quality of the delivery system that moves the books and other materials from place to place. The general public's enthusiasm for interlibrary loan wanes quickly if they have to wait weeks to receive the requested material. On the other hand, a quick response encourages further use of the interlibrary loan system.

The consultants have witnessed three and four-fold increases in interlibrary loan activity in areas where shared catalogs and quality delivery systems coexist. We have also observed instances where the impact of a shared catalog has been negligible because of the lack of a good mechanism for moving materials.

As the range of the numbers on the previous pages clearly illustrates, the ultimate cost of the Library of California's interlibrary loan/direct loan compensation program is impossible to accurately predict if the current transaction-based reimbursement plan is used. This is because the number of transactions is highly responsive to multiple external factors such as automation systems, delivery systems, the availability of electronic document delivery systems, and so forth.

That said, California's experience with transaction-based reimbursement does provide some insight into the future. Following is a summation of the total high and low estimates for a transaction-based reimbursement system.

	Low-End Estimate	**High-End Estimate**
FY 2000/2001	$ 17,100,000	$ 21,250,000
FY 2005/2006	$ 28,991,236	$ 53,196,261

Reimbursement/Compensation Options

Transaction-Based Reimbursement

California has proved that a large-scale transaction based reimbursement (TBR) program can work. Furthermore, such a system does have a number of advantages. A well designed TBR is generally perceived as being fair and has the advantage of increasing or decreasing based on actual activity.

However, unless the vast majority of transaction counting is automated, the cost of record-keeping can eat up much of the compensation. Furthermore, unless stringent rules are in place and enforced, this type of program is open to allegations of transaction "padding."

As has been indicated previously, the actual cost of transactions can vary significantly. Furthermore, all interlibrary loan transactions are not created equal; regional variations in wage levels, population density, and a plethora of other factors can significantly influence the cost of transactions. A single statewide reimbursement amount can be quite unequal in terms of its relationship to actual cost.

It has also been previously noted that the long-term costs of transaction-based compensation programs are very difficult to estimate. When the projections are carried out to FY 2005/2006, the range between the low-end and high-end estimates vary by over $ 20 million. This is because relatively minor changes in assumptions applied to the calculations result in major swings in total cost.

Base Payment for Participation with an Option for Transaction-Based Reimbursement

While none of the specific programs described earlier in this document use this approach, the consultants believe that the option deserves some consideration. This approach attempts to minimize clerical/record-keeping functions by providing a base payment of some sort for participation in a program such as interlibrary loan or direct loan. Transaction-based reimbursements are then provided only to those libraries that exceed some pre-determined threshold or level of imbalance.

There are several important advantages to this approach in addition to the reduction of the record keeping effort that allow more money to be used for improving library services. First, there is an immediate incentive for all libraries to participate in the program -- everybody gets something. Furthermore, the resulting higher participation rate in the program makes it more universal and, consequently, easier for the public to understand and access. Finally, the higher level of participation in the program and the resulting higher level of use by the public help build constituencies for the support of ongoing and/or increasing funding.

There are some drawbacks to this approach as well. Under this plan, some libraries would receive payment for doing little or nothing. This reduces the dollars available for transaction-based payment. There would also be less financial incentive for libraries to promote interlibrary loan and direct loan services to the public since many libraries would receive payment regardless of the volume of transactions that take place.

Because the number of potential participants in the Library of California is so large, it is difficult to arrive at a base amount that would at the same time be large enough to be an incentive for participation and small enough to provide an adequate amount to fairly compensate libraries with high transaction volume. For example, if the low-end estimate of participating libraries is used for FY 2000/2001 and a base payment of $ 2,500 was provided, the total required to fund base payments would be $ 7.5 million. This represents over 43% of the total estimated low-end reimbursement amount for FY 2000/2001. While base payments might encourage participation, lack of adequate funds to reimburse high volume lenders would discourage their enthusiasm and support for the program.

Purchase of Services or Products in Lieu of Transaction-Based Reimbursement

This approach combines elements of the Kansas program described earlier and the Massachusetts practice of indirect compensation. A program could be designed in which libraries are compensated for resource sharing activities with access to products and/or services such as licenses to electronic databases.

By aggregating demand, the State Library could reduce overall expenditures for information resources while extending public access to these resources. This kind of program also has the benefit of protecting library resources from local budgetary pressures and it, obviously, reduces the clerical/record-keeping burden.

Libraries of all sizes and types could benefit from this program depending on the resources that are chosen and the targeting of licenses to certain types of libraries. This approach would be particularly good as an incentive for small academic libraries and school libraries to participate in resource sharing programs.

A multi-tiered program would likely need to be devised to ensure that large libraries that are net lenders receive a benefit commensurate with their contribution to statewide resource sharing.

This approach also serves to reduce the need for certain kinds of interlibrary loan by providing a high level of access to alternative sources of information.

One of the major problems with this approach is determining what kinds of products or services should be purchased. Many librarians responding to the posting of the preliminary report indicated that it would be impossible to find any one product that would serve all libraries and their users well. Respondents stressed that flexibility in choosing products and/or services would be required if this method of compensation was implemented.

CONCLUSIONS/RECOMMENDATIONS

The consultants believe that it would be very difficult for California's public libraries to move too far away from a transaction-based reimbursement plan. Based on responses to the posting of the preliminary report on the World Wide Web, we also sense considerable support for a transaction-based system from academic libraries.

California has demonstrated that it can make a large-scale transaction-based reimbursement program work. We conclude that the Library of California interlibrary loan/direct loan compensation program should be, at least in part, transaction based.

However, the consultants also believe that a portion of the funding for interlibrary loan and direct loan should be used to encourage the use of innovative technology-based methods of resource sharing including broader access to electronic databases, the use of electronic interlibrary loan systems, and electronic document delivery. Such innovative projects have the potential for improving service to the public while reducing both the number of interlibrary loan transactions and the cost of both interlibrary loan and direct loan transactions.

Because of the significant regional differences that exist in California, we believe that decisions on the type of innovative programs to pursue should happen at the regional rather than at the state level.

Therefore, we recommend the following:

1. **California should expand the current transaction-based reimbursement program to include all types of libraries as described in the Library of California Act.**

2. **The California State Library Board should request funding for the interlibrary loan/direct loan program based on an estimate of reimbursable transactions plus 10% for innovative resource sharing projects.**

3. **California should distribute the funds generated by applying the existing formulae directly to participating libraries. If the appropriated amount falls short of the funding required, the "plus 10%" funds should be available to make up the shortfall.**

4. **California should distribute the balance of appropriated dollars (the "plus 10%" amount plus or minus the difference between the estimated reimbursement funding and the actual amount distributed under recommendation # 3) to regions to be used for innovative resource sharing projects.**

The additional 10% funding to be requested can be justified in three ways. First, expenditure of these funds may have the effect of decreasing the number of reimbursable transactions, and therefore the amount needed to fund the program in the future. Second, the expenditure of these funds may reduce the cost per transaction by providing more cost-effective methods of delivering information to the end user, again reducing the amount needed to fund the program in the future. Finally, the presence of these funds ensures that libraries will receive funding at or near the formula rate by providing a buffer to deal with unanticipated increases in transaction loads.